



**[4910-13-P]**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0239; Directorate Identifier 2010-SW-087-AD;  
Amendment 39-17552; AD 2013-16-14]**

**RIN 2120-AA64**

**Airworthiness Directives; Eurocopter Deutschland GmbH Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for all Eurocopter Deutschland GmbH (ECD) EC 135 P1, P2, P2+, T1, T2, and T2+ helicopters equipped with a certain main transmission housing upper part. This AD requires installing a corrugated washer in the middle of the main transmission filter housing upper part and modifying the main transmission housing upper part. This AD was prompted by an inspection of housing upper parts that revealed the bypass inlet in the oil filter area was not manufactured in accordance with applicable design specifications. The actions of this AD are intended to prevent failure of the main transmission and subsequent loss of control of the helicopter.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain documents listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641-0000 or (800) 232-0323, fax (972) 641-3775, or at <http://www.eurocopter.com/techpub>. You may review the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> or in person at the Docket Operations Office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the foreign authority's AD, any incorporated-by-reference service information, the economic evaluation, any comments received, and other information. The street address for the Docket Operations Office (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations Office, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

On March 14, 2013, at 78 FR 16196, the Federal Register published our notice of proposed rulemaking (NPRM), which proposed to amend 14 CFR part 39 to include an AD that would apply to ECD Model EC135 P1, P2, P2+, T1, T2, and T2+ helicopters with a certain serial numbered main transmission FS108 housing upper part, part number (P/N) 4649 301 034. The NPRM proposed to require installing a corrugated washer in the filter housing of the housing upper part and modifying each affected main transmission housing upper part by machining the oil filter bypass inlet. The proposed requirements were intended to prevent failure of the main transmission and subsequent loss of control of the helicopter.

The NPRM was prompted by AD No. 2010-0213, dated October 14, 2010, issued by the European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union. EASA issued AD No. 2010-0213 to correct an unsafe condition for the ECD model EC 135 and EC635 helicopters. EASA advises that a recent inspection on some housing upper parts for the main transmission FS108 revealed the bypass inlet in the oil filter area had not been manufactured in accordance with the applicable design specifications. EASA advises that this condition, if not detected and corrected, could adversely affect the oil-filter bypass function, which is essential for continued safe flight. The EASA AD requires a temporary modification of the main transmission housing upper part by installing a corrugated washer, and then a “rework” of the oil filter area to bring the affected parts within the applicable design specifications.

## **Comments**

We gave the public the opportunity to participate in developing this AD, but we did not receive any comments on the NPRM (78 FR 16196 March 14, 2013).

## **FAA's Determination**

These helicopters have been approved by the aviation authority of the Republic of Germany and are approved for operation in the United States. Pursuant to our bilateral agreement with the Republic of Germany, EASA, its technical representative, has notified us of the unsafe condition described in the EASA AD. We are issuing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs and that air safety and the public interest require adopting the AD requirements as proposed.

## **Related Service Information**

ECD has issued Alert Service Bulletin (ASB) ASB EC135-63A-017, Revision 0, dated October 11, 2010 (EC135-63A-017), which specifies removing the oil filter element and installing a corrugated washer. EC135-63A-017 also specifies reworking the affected filter housing upper part at the next repair or major overhaul of the main transmission, no later than 4,000 flight hours after receipt of the service bulletin. EASA classified this ASB as mandatory and issued AD 2010-0213 to ensure the continued airworthiness of these helicopters.

We have also reviewed ZF Luftfahrttechnik GmbH Service Instruction No. EC135FS108-1659-1009, dated September 14, 2010, which specifies procedures for

repairing the main transmission upper housing, and includes dimensions and tolerances for machining the housing upper part.

### **Costs of Compliance**

We estimate that this AD will affect 227 helicopters of U.S. Registry. Based on an average labor rate of \$85 per work hour, we estimate that operators may incur the following costs in order to comply with this AD. Installing the corrugated washer will require about .5 work hour, and required parts cost about \$10, for a cost per helicopter of about \$53, and a total cost to the U.S. operator fleet of \$12,031. Machining the housing upper part requires about 5 work-hours and required parts cost about \$73, for a total cost per helicopter of \$498, and a total cost to U.S. operators of \$113,046.

According to the ECD ASB, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage by Eurocopter. Accordingly, we have included all costs in our cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on helicopters identified in this rulemaking action.

### **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866;
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction; and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared an economic evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

## **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2013-16-14 **EUROCOPTER DEUTSCHLAND GMBH:** Amendment 39-17552;

Docket No. FAA-2013-0239; Directorate Identifier 2010-SW-087-AD.

#### **(a) Applicability.**

This AD applies to Eurocopter Deutschland GmbH Model EC135 P1, P2, P2+, T1, T2, and T2+ helicopters with a main transmission FS108 housing upper part, part number (P/N) 4649 301 034 and a serial number listed in Table 1 of Eurocopter Alert Service Bulletin EC135-63A-017, Revision 0, dated October 11, 2010 (ASB EC135-63A-017), certificated in any category.

#### **(b) Unsafe Condition.**

This AD defines the unsafe condition as an improperly manufactured bypass inlet in the oil filter area. This condition could adversely affect the oil-filter bypass function, resulting in failure of the main transmission and subsequent loss of control of the helicopter.

#### **(c) Effective Date.**

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(d) Compliance.**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions.**

(1) Within 3 months, remove the oil filter element and install a corrugated washer, P/N 0630100377, in the middle of the filter housing of the housing upper part as depicted in Figure 2 of ASB EC135-63A-017.

(2) Within 4,000 hours time-in-service or at the next main transmission repair or overhaul, whichever occurs first, machine the main transmission housing upper part in accordance with Annex A of ZF Luftfahrttechnik GmbH Service Instruction No. EC135FS108-1659-1009, dated September 14, 2010.

(3) Do not install a main transmission upper part, P/N 4649 301 034, on any helicopter unless it has been modified as required by paragraphs (e)(1) through (e)(2) of this AD.

**(f) Alternative Methods of Compliance (AMOCs).**

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or

certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information.**

The subject of this AD is addressed in European Aviation Safety Agency AD No. 2010-0213, dated October 14, 2010. You may view the EASA AD in the AD docket on the Internet at <http://www.regulations.gov>.

**(h) Subject.**

Joint Aircraft Service Component (JASC) Code: 6320: Main Rotor Gearbox.

**(i) Material Incorporated by Reference.**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Eurocopter Alert Service Bulletin EC135-63A-017, Revision 0, dated October 11, 2010.

(ii) ZF Luftfahrttechnik GmbH Service Instruction No. EC135FS108-1659-1009, dated September 14, 2010.

(3) For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641-0000 or (800) 232-0323, fax (972) 641-3775, or at <http://www.eurocopter.com/techpub>.

(4) You may view this service information that is incorporated by reference in the AD docket on the Internet at <http://www.regulations.gov>.

(5) You may also view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on August 2, 2013.

Lance T. Gant,

Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-19500 Filed 09/03/2013 at 8:45 am; Publication Date:  
09/04/2013]